With the end of daylights saving time (don’t get me started on the name), we get the opportunity to observe earlier in the evening as far as the clock is concerned anyway. The relatively mild weather for the month coupled with traditionally good seeing conditions and now bugs, makes for some of the best observing of the year. Dressed appropriately with a steaming mug of your favorite beverage and, of course, an observing partner, make November one of the ideal times to share astronomy, or reconnect with it. Some of my fondest observing memories have happened around the Thanksgiving holiday, as I personally logged over 80 objects in one November night with one of my observing buddies.

I have received substantial input (eight members), about my comments for trying to get the 32” telescope in operation. All of the comments have been in support of my suggestion to remake the scope. Several members have stepped forward to help with the construction and others have made suggestions for the most economical way to go. I will continue to solicit input and plan to have a presentation to make to the membership at the December meeting. I would not consider committing a substantial amount of our assets without explaining completely to the membership the expected costs and timeline. So be sure to be at the December meeting for my presentation. Of course you are also invited to attend the November meeting as well.

The current outreach numbers for the year continue to soar past the 4,000 mark and currently stand at 4,417! This just highlights the continual exceptional work done by ASEM members, thanks again for all you do.

Stacey Thater
AfA Executive Director
October DIGITAL imaging SIG by Dan Crowson

The theme of October’s Digital SIG was beginning imaging. Will Day gave a presentation on his efforts over the years. Will’s pictures show that you can take part in astrophotography with a camera and tripod you probably already own. Thanks to Will and all of the people that attended.

Building on what we’ve learned over the last few months, November will give us another opportunity to put things into practice. An imaging party will take place at the Danville Department of Conservation site on November 16th or 17th. It should be dark by 6 PM and the moon sets by 8 or 9 PM. This is a good time to see some dark skies, get help and spend time with others doing the same.

The next Digital SIG meeting will be November 20th at 7 PM at the Weldon Spring Interpretive Center. The topic will be “Choosing Targets”. Attendees will learn about determining field of view using CCDCalc and various planetarium software. We’ll then discuss how to pull images from online sky surveys and Aladin. These tools can also be used to identify objects in your images. We also plan on discussing an all-day imaging workshop coming up. Now is the time to put in your requests. There is always time available for other questions so please join us. Visit the Yahoo Group for more up to date information including weather backup plans (link below).


Taken with a Nikon D300S at 11mm f/2.8 at Brommelsick Park – August 21st, 2012

The latest news can always be found in the ASEMDigitalSIG Yahoo! Group – http://tech.groups.yahoo.com/group/ASEMDigitalSIG/
Some objects are just better with binoculars. M31, the subject of this month’s video at the General Meeting, when seen through the C14 at the observatory at Broemmelsiek is somewhat disappointing. The field of view isn’t wide enough to capture the entirety and with the local light pollution, you are left with a fuzzy patch impression. In contrast, I used my 11x80 binoculars in a true dark sky and M31 was a definite WOW! M31 stretched more than half way across the 4.5 degree field of view and I could see dust lanes and the two companions. Take along a pair of binoculars on your next excursion to dark skies and give M31 a quick peek and you’ll be impress too.

This month’s selections represent a good distribution of object including four galaxies, three globular clusters, and three open clusters. Although they are sorted below in right ascension order, they are spread out all over the sky so you’ll need a star atlas or computer planetarium program to find them. Three of the galaxies (M31, M32, and M110) are all in the same wide field eyepiece although the last two will take a bit of time to find. The Triangulum Galaxy will be difficult unless you have dark sky. M2 and M30 will be fairly low in the west by 9 PM, so you might need to get out a bit earlier. With Daylight Savings (Wasting?) time ending at the beginning of the month, it will be dark by 6 PM so you can get a few hours of observing in and still get a good night’s sleep.

<table>
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<th>Number</th>
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<th>Type</th>
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<td>52</td>
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</tbody>
</table>

*Binocular Difficulty*

- Challenge
- Easy
- Tougther

*7x35, 7x50, and 10x50 Binoculars

See you out there!
**Member Benefit: Google Apps, Google+, and More**

All members of the Astronomical Society of Eastern Missouri are eligible to participate in the Club's Google Apps. Google Apps has the following features

1. Each member has an email account at ASEMonline.org (eg, steve.boerner@asemonline.org). The mail account can be accessed from any computer connected to the Internet. While you may not wish to use the email account, the user name and password are the keys to gain access to the rest of the Google Apps. Contact steve.boerner@asemonline.org to find your user name.

2. Each member gets one or more personal calendars to use as they wish, but the official ASEM calendar is layered on these personal calendars. ASEM facilities and equipment like the observatory at Broemmelsiek Park are reserved with these Google calendars.

3. Each member gets one or more personal web sites to describe his/her activities. We can make these public (or not - your choice). The web information should be in keeping with the Alliance for Astronomy and ASEM mission and goals. Contact admin@asemonline.org if you would like a personal web page space created.

4. Each member gets access to an on line word processor, spreadsheet and presentation program for their personal use. Documents can be accessed from any computer connected to the Internet and can be shared if desired.

5. Each member now has access to Google+, Google Drive and Picasa web albums.

To access these services you need to navigate to ASEM’s webpage at [http://www.asemonline.org](http://www.asemonline.org) with your favorite browser. Once loaded, scroll to the bottom of the page and click “Sign In” as shown below by the orange arrow and circled in yellow.

![Sign In](image.png)

Once you have correctly entered your username and password you will see a new toolbar at the top of the ASEM screen as shown with the orange and yellow arrows below. Email admin@asemonline.org if you have problems with your username or password.

![Toolbar](image2.png)

Selections on the left of the orange arrow lead to applications like Google+, email, calendar, and such. Selections on the right of the yellow arrow lead to various configuration options.

Have fun playing!
Marv Stewart (General Astronomical raconteur)

A visit to Hubble.

My wife Barb and I finally made it to the Air and Space Museum in Washington D.C. I had always wanted to see the Hubble Space Telescope and now we were standing before it. The promotional material describes it as being as large as a school bus, but having never seen a school bus standing on its back bumper tilted upward at a ten degree angle, I wasn't prepared for its size. Its a monster. Of course the Hubble on display is a twin, everyone knows the real one is in space and working just fine. But, this is the one that all the components that went into making the HST were checked for fit before being attached to the working model. For instance the wiring harness. However, when you stand there at look up at it you begin to understand what an achievement it is.

It took a moment to realize that the black background on the wall behind Hubble wasn't a simulation of deep dark space, but its solar panels. Hubble's two twenty five foot solar panels produce 2,800 watts of power. It seems like yesterday, and that time has been compressed when you realize it was launched in 1990, for an expected 20 year mission. We hardly remember the HST's lackluster start, we have become almost spoiled by its images. NASA, on average, gets about 120 gigabytes a week of data from Hubble. Standing to the right of me in the photo is my cousin Lawrence Philipps, our guide to Washington. In the over all views the people standing near the HST give you an idea of its size. In another room high against a black ceiling hangs a Voyager space craft, after Hubble it looks so small and fragile, but think of what we learned from their missions, and are still learning today.

If you haven't been to the Air and Space Museum add it to your bucket list. Wear comfortable shoes and plan on making a day of it. This isn't a place where they display old hardware, it is a place that gives testimony to who we are as a people and what we want to be. Here you can start with the original Wright brothers Flyer and follow the steps to Hubble. There's little doubt they are going to need a bigger Museum.

Club Contacts

Membership

Membership issues can be addressed through our executive director Stacey Thater (pronounced “totter”) at these addresses:

Email: sthater@stchas.edu
Snail mail:

Alliance for Astronomy (ASEM)
PO Box 141
New Melle MO 63365
Committees

Comments, questions, suggestions and money (just kidding) may be sent to the following addresses:

programs@asemonline.org

Use this address to communicate with the program committee. If you have something to present at a meeting or wish to contribute and let someone else perform, send it here. Questions and/or suggestions about programming etc. Remember, they are here to help you. This is a user friendly society and we like to see members get up and share.

equipment@asemonline.org

This address is used to find out about ASEM loaner equipment. If you find something amiss at BPark by all means report it here. If you are curious about borrowing an item, put in a request via this address.

hospitality@asemonline.org

Got a main dish you’d like to bring to the potluck? We sure could use it AND you will be reimbursed for your expenses.

newsletter@asemonline.org

Primary contact for the newsletter. Got an article or notice you’d like to see published? Send it here and be famous!

Outreach@asemonline.org

Special requests for groups at Broemmelsiek Park including:

- Notice of large party (more than groups of twenty)
- Request for specific requirements needed (school assignment, merit badge requirements, etc.)
- Requests for Star Party / Telescope event at another location

steve.boerner@asemonline.org

Web page and all other communications not covered above

entertainment

Late breaking news and member adventures (or shenanigans as the case may be) can usually be found at STLAstronomy in yahoo groups. If you aren’t a member, you should join. Go to

http://tech.groups.yahoo.com/group/STLAstronomy/

and click “Join”

Think Clear, dark skies